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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,313	09/29/2003	Shawn P. Duffy	1760P1	1519

7590 11/25/2005  
PPG INDUSTRIES, INC.  
Intellectual Property Department  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,313	<b>Applicant(s)</b> DUFFY ET AL.	
	<b>Examiner</b> Robert Sellers	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 15-18, 20-22, 26 and 29-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13, 14, 19, 23-25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-36 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/20/2004</u> . | 6) <input type="checkbox"/> Other: ____  |

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1. The specification on page 1, paragraph 1 should be updated to indicate that parent application no. 10/160,466 is now U.S. Patent No. 6,737,163.
2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-8, 13, 14, 19, 23-25, 27 and 28, drawn to a powder composition comprising a tertiary amine-terminated poly(urethane)urea of Formula I and an epoxy resin and/or a siloxane resin, classified in class 525, subclass 474.
  - II. Claims 9-12, 26 and 32, drawn to the powder composition of Invention I wherein the tertiary amine-terminated poly(urethane)urea further comprises an acidic hydrogen-containing compound, classified in class 525, subclass 476.
  - III. Claims 15 and 16, drawn to a method for coating a substrate, classified in class 427, subclass 386.
  - IV. Claims 17 and 18, drawn to a substrate coated according to the method of Invention III, classified in class 428, subclass 418.
  - V. Claims 20-22 and 29-31, drawn to the powder composition of Invention I wherein the epoxy resin comprises an epoxy/hydroxy-containing resin containing an epoxy resin and a hydroxy resin, classified in class 525, subclass 438.

- VI. Claims 33 and 34, drawn to a catalyst composition containing the reaction product of a tertiary amine-terminated poly(urethane)urea of Formula I and an acidic hydrogen-containing compound, classified in class 525, subclass 452.
- VII. Claims 35 and 36, drawn to a catalyst composition containing the tertiary amine-terminated poly(urethane)urea of Formula I alone, classified in class 525, subclass 459.

The inventions are distinct from each other because:

3. Inventions I and (II or IV or V) are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as molding composition and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

Inventions (II or V) and IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding formulation and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

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4. Inventions (VI or VII) and (I or II or IV or V or VI) are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding formulation and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

Inventions (VII) and (VI) are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding composition and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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5. Inventions III and IV are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown:

(1) that the process as claimed can be used to make another materially different product or (2) that the product as claimed can be made by another materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another materially different process such as the B-staging of the powder composition following by curing at an elevated temperature.

6. Inventions (I or II or V or VI or VII) and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product such as a method of fabricating a molded article.

Restriction for examination purposes as indicated is proper because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification.

Claims 1-36 are generic to a plurality of disclosed patentably distinct species comprising:

- (a) The tertiary amine-terminated poly(urethane)ureas of Formula I.
- (b) The epoxy resin alone, the siloxane resin alone, or a combination of the epoxy resin and siloxane resin.
- (c) Contingent upon the election of Group II or VI, items (a) and (b) hereinabove and the acidic hydrogen-containing compounds.
- (d) Contingent upon the election of Group V, items (a) and (b) hereinabove and the epoxy/hydroxy-containing resins.
- (e) Contingent upon the election of Group III or IV, items (a) and (b) hereinabove and the substrates of claim 18.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species within each of the appropriate items listed hereinabove, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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During a telephone conversation with Don Palladino on October 28, 2005, a provisional election was made with traverse to prosecute Invention I and (a) the catalyst of Formula I derived from dimethylaminopropylamine, isophorone diisocyanate and bisphenol A shown in Example 1 on page 14 of the specification, and (b) a siloxane resin, claims 1-8, 13, 14, 23-25, 27 and 28. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-12, 15-18, 20-22, 26 and 29-36 are withdrawn from further consideration under 37 CFR 1.142(b) as being drawn to non-elected inventions. Claim 19 is withdrawn as being directed to the non-elected species of a polyepoxide.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



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7. Claims 1-8, 13, 14, 23-25, 27 and 28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 13, 14, 25, 26 and 28-32 of copending Application No. 11/190,666. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application require a material having a structure conforming to Formula I of the instant application wherein  $(Y)_a$  of Formula I is  $-NR_3R_4$  which corresponds to  $-NR_3R_4$  of the structural formula of the copending application. The polyepoxide of the copending application is encompassed by the resin (b) of the instant application including an epoxy-containing resin.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-8, 13, 14, 23-25, 27 and 28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 13, 14, 19, 22 and 23 of U.S. Patent No. 6,737,163. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons espoused with respect to copending application no. 11/190,666 explained in the previous paragraph.

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9. The closest prior art to Donnelly et al. Patent No. 5,569,733 (col. 1, lines 40-56) sets forth the claimed tertiary amine-terminated poly(urethane)urea of Formula I wherein the polyepoxide is blended with a crosslinking agent. The claimed composition denoted as a powder along with the stipulation that "the composition cures in the absence of any additional component" in the last line of independent claim 1 is not recited.


10. Makhoul et al. Patent No. 5,470,886 (col. 3, line 67 to col. 4, line 8) discloses the reaction product of a polyisocyanate, a primary or secondary amine group-containing diamine with a tertiary amine group, and an acid functional compound mixed with a polyepoxide (col. 2, lines 7-11). The claimed composition in the form of a powder is not recited, nor is there any motivation to formulate the composition as a powder since it is employed either as a liquid spray or a molten liquid (col. 4, lines 34-41).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Kim et al. Patent No. 6,335,003 and Haas et al. Patent No. 6,759,363 are directed to reaction products of polyisocyanates and tertiary amine-containing diamines or aminoalcohols without the claimed epoxy and/or siloxane resin(s) in a powder form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

rs  
11/14/2005



ROBERT E.L. SELLERS  
PRIMARY EXAMINER